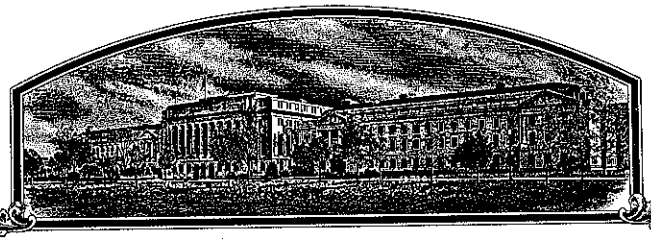


No. 9400220

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Tainio Technology & Technique, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS PERMITTED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'Symphony'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington, D.C. *this* 28th *day of* February *in the year of our Lord one thousand nine hundred and* ninety-five.

Attest:

Kenneth R. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and edition date on all reproductions.* OMB APPROVED NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(INSTRUCTIONS ON REVERSE)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)
Tainio Technology & Technique, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.
TV-10982-1

3. VARIETY NAME
Symphony

4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP)
Rt 2 Box 286
S. 12102 Andrus Rd.
Cheney, Washington 99004-9649

5. PHONE (include area code)
(509)747-5471

FOR OFFICIAL USE ONLY

PVPO NUMBER
9400220

FILING
Date: July 8, 1994
Time: ☐ A.M. ☐ P.M.

FEES RECEIVED
Filing and Examination Fee: $2,325.00
Date: July 8, 1994
Certificate Fee: $275.00
Date: February 1, 1995

6. GENUS AND SPECIES NAME
Triticum aestivum L.

7. FAMILY NAME *(Botanical)*
Gramineae

8. CROP KIND NAME *(Common Name)*
Wheat (common)

9. DATE OF DETERMINATION
October 18, 1990

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)
Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
Washington

12. DATE OF INCORPORATION
1986

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

same as above

PHONE (include area code):

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow* **INSTRUCTIONS** *on reverse)*

a. ☒ Exhibit A, Origin and Breeding History of the Variety
b. ☒ Exhibit B, Novelty Statement
c. ☒ Exhibit C, Objective Description of Variety
d. ☒ Exhibit D, Additional Description of Variety
e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership
f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office July 6, 1994
g. ☒ Filing and Examination Fee ($2,325) made payable to "Treasurer of the United States"

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See section 83(a) of the Plant Variety Protection Act)* ☒ YES *(If "YES," answer items 16 and 17 below)* ☐ NO *(If "NO," skip to item 18 below)*

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☒ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
☐ YES (If "YES," through ☐ Plant Variety Protection Act ☐ Patent Act. Give date: _____).
☒ NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☐ YES (If "YES," GIVE NAMES OF COUNTRIES AND DATES) _____
☒ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT [Owner(s)]	CAPACITY OR TITLE	DATE
Tainio Technology & Technique, Inc. Bruce Tainio	President	July 5, 1994
SIGNATURE OF APPLICANT [Owner(s)]	CAPACITY OR TITLE	DATE

SD-470 (06-93) *Editions of Forms LS-470 (3/86) and CSSD-470 (5/89) are to be destroyed.*

CONTINUED ON REVERSE

1

Exhibit A - Origin and Breeding History 9400220
Symphony

Symphony resulted from a five-way cross to combine resistance to diseases with good plant types and excellent winter hardiness.

Parentage - Avalon - a British variety
Breeder PBI, Cambridge

Armanda - a British variety
Breeder Nickerson RPB Ltd.

Hatton - a Washington State University
1979 release

Nk812 - a Northrup King variety

Rescler - a French variety
Breeder I.N.R.A.

{[(Hatton x Armanda) F1 x Avalon] F1 x [Nk812]{F1 x {Rescler}

The new variety was developed by the modified pedigree method of breeding with plant selections made in the F1, F2, F3 and F4 generations, with line selection in the F9 generation. In 1988 the F9 generation 62 of 100 plant perogeny rows were homozygous for plant character, head size, kernel size and color. These were then bulked to form breeder's seed. Breeder's seed in 1990 was in the F11 generation of selfing.

Test plots were planted in nurseries in 1990, 91 and 92. Breeders seed was advanced to 1000 pounds in 92 where observations indicate symphony is uniform and stable within commercially acceptable limits.

Exhibit B - Novelty Statement

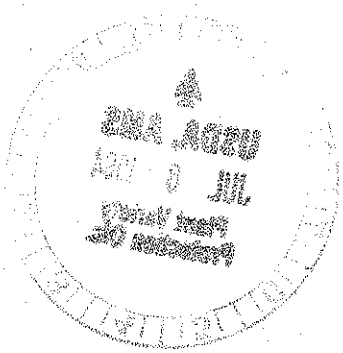
To our knowledge, Symphony most nearly resembles Avalon and Hatton.

Symphony compared to Avalon

(1) Symphony is 20 cm taller than Avalon.
(2) Symphony has larger seeds than Avalon.
(3) Symphony will average 14+% protein were as avalon will only average 10%.
(4) Symphony is resistant to stem rust, leaf rust and stripe rust, where as Avalon is not.
(5) Symphony is 60% more winter hardy than Avalon.

Symphony compared to Hatton.

(1) Symphony is only slightly awnletted where as Hatton is awned.
(2) Symphony is resistant to stripe rust where as Hatton is susceptible.
(3) Symphony will run an average protein level 3% to 4% higher than Hatton.
(4) Symphony will average 25 to 30 cm shorter than Hatton.
(5) Symphony averaged 27 bushel seed yield increase over Hatton in Field plot tests for the past three years.



FORM APPROVED: OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
COMMODITIES SCIENTIFIC SUPPORT DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY
WHEAT (*TRITICUM SPP.*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Tainio Technology & Technique, Inc.

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
Rt 2 Box 286
S. 12102 Andrus Rd.
Cheney, Washington 99004-9649

FOR OFFICIAL USE ONLY

PVPO NUMBER 9400220

VARIETY NAME OR TEMPORARY DESIGNATION
Symphony

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. KIND:
[1] 1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

2. TYPE:
[2] 1 = SPRING 2 = WINTER 3 = OTHER (*Specify*) _____
[2] 1 = SOFT 2 = HARD 3 = OTHER (*Specify*) _____
[2] 1 = WHITE 2 = RED 3 = OTHER (*Specify*) _____

3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:
[2][4][2] FIRST FLOWERING
[2][5][5] LAST FLOWERING

4. MATURITY (*50% Flowering*):
[ ][ ] NO. OF DAYS *EARLIER* THAN .....
[1][5] NO. OF DAYS *LATER* THAN .....
[ ] [5] 1 = ARTHUR 2 = SCOUT 3 = CHRIS 4 = LEMHI 5 = NUGAINES 6 = LEEDS

5. PLANT HEIGHT (*From soil level to top of head*):
[0][9][2] CM. HIGH
[1][7] CM. TALLER THAN ..... [5]
[ ][ ] CM. SHORTER THAN ..... [ ] 1 = ARTHUR 2 = SCOUT 3 = CHRIS 4 = LEMHI 5 = NUGAINES 6 = LEEDS

6. PLANT COLOR AT BOOTING (*See reverse*):
[2] 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTHER COLOR:
[1] 1 = YELLOW 2 = PURPLE

8. STEM:
[2] Anthocyanin: 1 = ABSENT 2 = PRESENT
[2] Waxy bloom: 1 = ABSENT 2 = PRESENT
[2] Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT
[1] Internodes: 1 = HOLLOW 2 = SOLID
[0][3] NO. OF NODES (*Originating from node above ground*)
[2][6] CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES:
[1] Anthocyanin: 1 = ABSENT 2 = PRESENT
[1] Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:
[1] Flag leaf at booting stage: 1 = ERECT 2 = RECURVED 3 = OTHER (*Specify*): _____
[2] Flag leaf: 1 = NOT TWISTED 2 = TWISTED
[1] Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT
[2] Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT
[1][2] MM. LEAF WIDTH (*First leaf below flag leaf*)
[2][0] CM. LEAF LENGTH (*First leaf below flag leaf*):

9400220

11. HEAD:

[1] Density: 1 = LAX 2 = DENSE

[2] Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER (Specify) _____

[2] Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNED

[1] Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED 5 = BROWN 6 = BLACK 7 = OTHER (Specify): _____

[1][3] CM. LENGTH [1][5] MM. WIDTH

12. GLUMES AT MATURITY:

[3] Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.) 3 = LONG (CA. 9 mm.)

[3] Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.) 3 = WIDE (CA. 4 mm.)

[3] Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE

[3] Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

13. COLEOPTILE COLOR:

[1] 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

[1] 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

[2] 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

16. SEED:

[3] Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL

[1] Cheek: 1 = ROUNDED 2 = ANGULAR

[2] Brush: 1 = SHORT 2 = MEDIUM 3 = LONG

[1] Brush: 1 = NOT COLLARED 2 = COLLARED

[ ] Phenol reaction (See instructions): 1 = IVORY 2 = FAWN 3 = LT. BROWN 4 = BROWN 5 = BLACK

[3] Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify) _____

[0][8] MM. LENGTH [0][4] MM. WIDTH [3][9] GM. PER 1000 SEEDS

17. SEED CREASE:

[2] Width: 1 = 60% OR LESS OF KERNEL 'WINOKA' 2 = 80% OR LESS OF KERNEL 'CHRIS' 3 = NEARLY AS WIDE AS KERNEL 'LEMHI'

[2] Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT' 2 = 35% OR LESS OF KERNEL 'CHRIS' 3 = 50% OR LESS OF KERNEL 'LEMHI'

18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[2] STEM RUST (Races) All

[2] LEAF RUST (Races) All

[2] STRIPE RUST (Races) All

[2] LOOSE SMUT

[0] POWDERY MILDEW

[2] BUNT

[ ] OTHER (Specify) _____

19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[0] SAWFLY

[0] APHID (Bydv.)

[0] GREEN BUG

[0] CEREAL LEAF BEETLE

[0] OTHER (Specify) _____

HESSIAN FLY RACES: [ ] GP [ ] A [ ] B [ ] C [ ] D [ ] E [ ] F [ ] G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Hatton	Seed size	Avalon
Leaf size	Hatton	Seed shape	Avalon
Leaf color	Hatton	Coleoptile elongation	Hatton
Leaf carriage	Hatton	Seedling pigmentation	Avalon

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(a) L.W. Briggle and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.

(b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

Exhibit D - Additional Description of Symphony

Symphony is a common hard red winter wheat, Triticum aestivum L.

Symphony is similar to Hatton in flowering date.

Symphony has averaged 92 cm (36.2 inches) in height in Eastern Washington.

At booting the plant color is dark green, in comparison to most area grown soft white winter wheat.

Anther color of Symphony is yellow.

Anthocyanin is present in the stem of Symphony only from early drying stage of maturity. A moderate waxy bloom occurs on the stem and flag leaf sheath. Stems are strong and yellow with some anthocyanin at maturity.

The auricles are glabous and anthocyanin is absent.

Leaves are dark green on the plants through booting and turn blue green after head emergence. The flag leaves are generally slightly twisted. Hairs are absent on the first leaf sheath. A moderate level of waxy bloom occurs on the last leaf sheath.

Spikes are dense, strap, apically awnletted, yellow and generally upright at maturity. The longest awnlet per spike of Symphony ranges from 1 to 3 cm. Spike width and length are variable with production level and population averaging 13 cm in length and 15 mm wide.

The glumes of Symphony are long and wide. Shoulders are rounded. Beaks are acuminate.

Coleoptile color of symphony is white.

Seedling anthocyanin is absent.

Kernels are red in color and elliptical in shape, with rounded cheeks and a wide shallow crease. The brush is medium in size. Kernels average 8 mm long and 4 mm wide and about 39 grams per 1000.

Symphony has been highly resistant to all races of stem rust, leaf rust and stripe rust, occurring in Eastern Washington.

Symphony has been showing excellent resistance to loose smut and bunt.

Symphony is tolerant to powdery mildew and is susceptible to Cephalosporium stripe.

Symphony has not been checked for insect resistance.

Symphony has excellent straw strength with large to very large head or spike size.

Symphony has an excellent protein potential averaging 14+ % over three years of testing and grown under low to moderate nitrogen fertility levels, verses Hatton at 10% protein under the same conditions.

Symphony has an excellent rooting character and is very winter hardy comparable to Daws soft white winter wheat.

Exhibit E - Statement of the basis of applicant's ownership.

Symphony was originated and developed by Bruce Tainio the Plant Breeder for Tainio Technology & Technique, Inc. All rights to any invention, discovery or development made by an employee are assigned to the company.
No rights to such invention, discovery or development are retained by the employee.